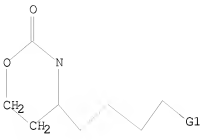
L1 STR



G1 Ak,Cy

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED -       27 TO ITERATE

100.0% PROCESSED       27 ITERATIONS                                4 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          229 TO      851
PROJECTED ANSWERS:               4 TO      200

L2            4 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 16:13:51 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      335 TO ITERATE

100.0% PROCESSED      335 ITERATIONS                               81 ANSWERS
SEARCH TIME: 00.00.01

L3           81 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                             178.36     178.57

FILE 'CAPLUS' ENTERED AT 16:13:55 ON 19 MAY 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 19 May 2008 VOL 148 ISS 21
FILE LAST UPDATED: 18 May 2008 (20080518/ED)

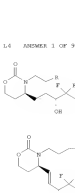
=> s l3
L4 9 L3

=> d ibib abs hitstr tot

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:1140256 CAPLUS
DOCUMENT NUMBER: 146:229363
TITLE: Preparation of oxazine derivatives as Ep4 receptor agonists and antiglaucoma agents
INVENTOR(S): Colucci, John; Ban, Yongsky; Farand, Julie A.
PATENT ASSIGNEE(S): Merck Frosst Canada Ltd., Can.
SOURCE: PCT Int. Appl., 56pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007024462	A1	20070208	WO 2006-CA1254	20060728
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
AU 2006275263	A1	20070208	AU 2006-275263	20060728
CA 2616408	A1	20070208	CA 2006-2616408	20060728
EP 1921957	A1	20080423	EP 2006-761199	20060728
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRIORITY APPLN. INFO.:			US 2005-705120P	P 20050803
			WO 2006-CA1254	W 20060728

OTHER SOURCE(S): MARPAT 146:229363
GI



L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

AB This invention relates to potent selective agonists of the EP4 subtype of prostaglandin E2 receptors I, wherein P represents (CH2)xCOOR3, (CH2)xC3-10 cycloalkyl; -(CH2)xC3-10 heterocyclyl, (CH2)xC5-10 aryl, said cycloalkyl, heterocyclyl, and aryl substituted with R2; provided that when P is - (CH2)xC3-10 heterocyclyl it does not represent thienyl; R1 independently represents hydrogen, C1-6-alkyl, halogen, CF3, aryl; said aryl optionally substituted with 1-3 groups of halogen, C1-6 alkyl, CF3, or N(R4)2; R2 represents COOR3 or a carboxylic acid isostere; R3 and R4 independently represent H, or C1-6-alkyl; n represents 0-3; x is 2-5, their use or a formulation thereof in the treatment of glaucoma and other conditions, which are related to elevated intraocular pressure in the eye of a patient. This invention further relates to the use of the compds. of this invention for mediating the bone modeling and remodeling processes of the osteoblasts and osteoclasts. Thus, oxazine II was prepared and tested in rats as Ep4 receptor agonist in osteoblastic cell lines and in bone tissue. Effects of an EP4 agonist on intraocular pressure in rabbits and monkeys, are reported. Title compds. showed improved ocular tolerability in animal species such as rabbits and cynomolgus monkeys. The activity range of the compds. of this invention for bone use is between 0.01 and 100,000 nM. Stable expression of prostanoid receptors in the human embryonic kidney (HEK) 293 (EBNA) cell line is reported.

IT 924622-95-7P 924622-97-9P 924622-99-1P
924623-02-9P 924623-03-0P 924623-05-2P
924623-06-3P 924623-07-4P 924623-08-5P
924623-09-6P 924623-11-0P 924623-12-1P

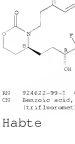
L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
924623-13-2P 924623-14-3P 924623-15-4P
924623-16-5P 924623-17-6P 924623-18-7P
924623-19-8P 924628-52-4P 924628-53-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of oxazine derivs. as Ep4 receptor agonists antiglaucoma agents)

RN 924622-95-7 CAPLUS
CN Benzoic acid, 4-[2-[(4S)-4-[(3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 924622-97-9 CAPLUS
CN Benzoic acid, 4-[2-[(4S)-4-[(3R)-4,4-difluoro-3-hydroxy-4-[3-(trifluoromethyl)phenyl]butyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]- (CA INDEX NAME)

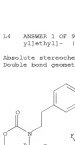
Absolute stereochemistry.



RN 924622-99-1 CAPLUS
CN Benzoic acid, 4-[2-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
yl]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



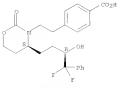
RN 924623-02-9 CAPLUS
CN Benzoic acid, 4-[2-[(4S)-4-[(3R)-4-(3,5-dimethylphenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 924623-03-0 CAPLUS
CN Benzoic acid, 4-[2-[(4S)-4-[(3R)-4,4-difluoro-3-hydroxy-4-phenylbutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]- (CA INDEX NAME)

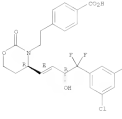
Absolute stereochemistry.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924623-05-2 CAPLUS
CN Benzoic acid, 4-[[2-[(4R)-4-[(1E,3R)-4-(3,5-dichlorophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

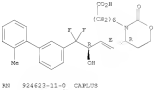


RN 924623-06-3 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(1E,3R)-4-[3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

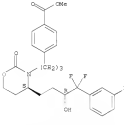
L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 924623-11-0 CAPLUS
CN Benzoic acid, 4-[3-[(4R)-4-[(3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, methyl ester (CA INDEX NAME)

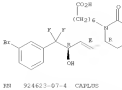
Absolute stereochemistry.



RN 924623-12-1 CAPLUS
CN Benzoic acid, 4-[3-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

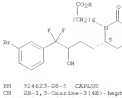
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



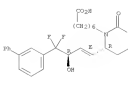
RN 924623-07-4 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[4-(3-bromophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.



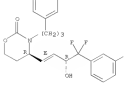
RN 924623-08-5 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(1E,3S)-4-[1,1'-biphenyl]-3-yl-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



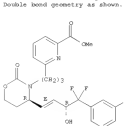
RN 924623-09-6 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-(2'-methyl[1,1'-biphenyl]-3-yl)-1-buten-1-yl]dihydro-2-oxo-, (4R)- (CA

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924623-13-2 CAPLUS
CN 2-Pyridinecarboxylic acid, 6-[3-[(4R)-4-[(1E,3R)-4-(3,5-dichlorophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, methyl ester (CA INDEX NAME)

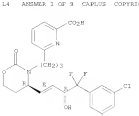
Absolute stereochemistry.
Double bond geometry as shown.



RN 924623-14-3 CAPLUS
CN 2-Pyridinecarboxylic acid, 6-[3-[(4R)-4-[(1E,3R)-4-(3,5-dichlorophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924623-15-4 CAPLUS
CN 5-Thiazolecarboxylic acid, 2-[3-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

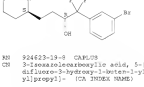
RN 924623-16-5 CAPLUS
CN 5-Thiazolecarboxylic acid, 2-[3-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 924623-19-8 CAPLUS
CN 3-Isoxazolecarboxylic acid, 5-[3-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

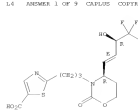
Absolute stereochemistry.
Double bond geometry as shown.



RN 924628-52-4 CAPLUS
CN Cyclohexanecarboxylic acid, 4-[2-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]- (CA INDEX NAME)

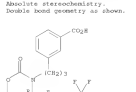
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924623-17-6 CAPLUS
CN Benzoic acid, 3-[3-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



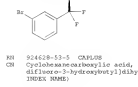
RN 924623-18-7 CAPLUS
CN Benzoic acid, 3-[3-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 924628-53-5 CAPLUS
CN 4-Isoxazolecarboxylic acid, 4-[2-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



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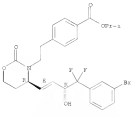
924622-96-8P 924622-98-0P 924623-00-7P
924623-01-8P 924623-04-1P 924623-10-9P
924623-27-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of oxazine derivs. as Ep4 receptor agonists antiglaucoma agents)
RN 924622-92-4 CAPLUS
CN Benzoic acid, 4-[2-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]-, 1-methylethyl ester (CA INDEX NAME)

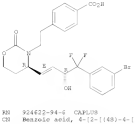
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924622-93-5 CAPLUS
CN Benzoic acid, 4-[2-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]- (CA INDEX NAME)

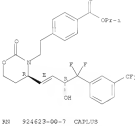
Absolute stereochemistry.
Double bond geometry as shown.



RN 924622-94-6 CAPLUS
CN Benzoic acid, 4-[2-[(4S)-4-[(3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924623-00-7 CAPLUS
CN Benzoic acid,
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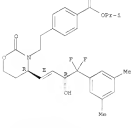
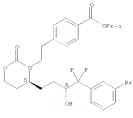
Absolute stereochemistry.
Double bond geometry as shown.



RN 924623-01-8 CAPLUS
CN Benzoic acid,
4-[2-[(4R)-4-[(1E,3R)-4-(3,5-dimethylphenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]- (CA INDEX NAME)

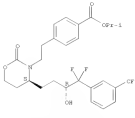
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924622-96-8 CAPLUS
CN Benzoic acid, 4-[2-[(4S)-4-[(3R)-4,4-difluoro-3-hydroxy-4-[3-(trifluoromethyl)phenyl]butyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]-, 1-methylethyl ester (CA INDEX NAME)

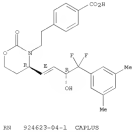
Absolute stereochemistry.



RN 924622-98-0 CAPLUS
CN Benzoic acid, 4-[2-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]-, 1-methylethyl ester (CA INDEX NAME)

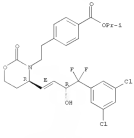
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924623-04-1 CAPLUS
CN Benzoic acid,
4-[2-[(4S)-4-[(1E,3R)-4-(3,5-dichlorophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]-, 1-methylethyl ester (CA INDEX NAME)

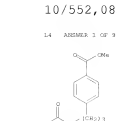
Absolute stereochemistry.
Double bond geometry as shown.



RN 924623-06-3 CAPLUS
CN Benzoic acid, 4-[3-[(4R)-4-[(1E,3S)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

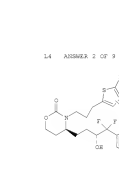


RN 924623-27-9 CAPLUS
CN Benzoic acid, 4-[2-[(4R)-4-[(1E)-4-(3-bromophenyl)-4,4-difluoro-3-oxo-1-buten-1-yl]-5-hydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]ethyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



AB This invention relates to potent selective agonists of the EP4 subtype of prostaglandin E2 receptors I, wherein R1 independently represents hydrogen, C1-6 alkyl, halogen, CF3, aryl, said aryl optionally substituted with 1 to 3 groups of halogen, C1-6 alkyl, CF3, substituted amine; R2 represents R, or halogen; R3 represents COOR or carboxylic acid isostere; n represents 0-3; their use or a formulation thereof in the treatment of glaucoma and other conditions, which are related to elevated intraocular pressure in the eye of a patient. This invention further relates to the use of the compds. of this invention for mediating the bone modeling and remodeling processes of the osteoblasts and osteoclasts. Thus, oxazine II was prepared and tested in rats as EP4 receptor agonist in osteoblastic cell lines and in bone tissue. Effects of an EP4 agonist on intraocular pressure in rabbits and monkeys, are reported. Table compds. showed improved ocular tolerability in animal species such as rabbits and cynomolgus monkeys.

IT 924202-94-7P 924305-95-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of oxazine derivs. as EP4 receptor agonists and antiglaucoma agents)

RN 924202-94-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:143969 CAPLUS
DOCUMENT NUMBER: 146:229362
TITLE: Preparation of oxazine derivatives as Ep4 receptor agonists and antiglaucoma agents
INVENTOR(S): Colucci, John; Han, Yongxin; Fatand, Julie A.
PATENT ASSIGNEE(S): Merck Frosst Canada Ltd., Can.
SOURCE: PCT Int. Appl., 49pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007014454	A1	20070208	WO 2006-CA1143	20060718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2006275270	A1	20070208	AU 2006-275270	20060718
CA 2616694	A1	20070208	CA 2006-2616694	20060718
EP 1912937	A1	20080423	EP 2006-761196	20060718
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PRIORITY APPLN. INFO.:			US 2005-705149P	P 20050803
			WO 2006-CA1143	W 20060718

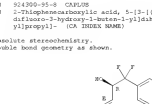
OTHER SOURCE(S): MARPAT 146:229362
GI

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)
yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 924300-95-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

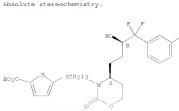


IT 924300-96-9P 924300-98-1P 924301-00-8P 924301-03-1P 924301-05-3P 924301-07-5P 924301-08-6P 924301-09-7P 924301-11-1P 924301-12-2P 924301-13-3P 924301-15-5P 924301-17-7P 924301-39-2P 924301-79-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of oxazine derivs. as EP4 receptor agonists and antiglaucoma agents)

RN 924300-96-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-
(CA

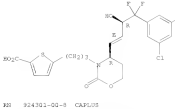
L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
INDEX NAME)

Absolute stereochemistry.



RN 924700-98-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E,7R)-4-(3,5-dichlorophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

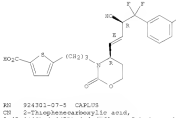
Absolute stereochemistry.
Double bond geometry as shown.



RN 924701-00-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(3R)-4-(3,5-dichlorophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

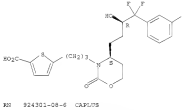
Absolute stereochemistry.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924701-07-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(3R)-4,4-difluoro-3-hydroxy-4-[3-(trifluoromethyl)phenyl]butyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

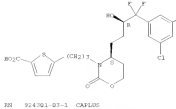
Absolute stereochemistry.



RN 924701-08-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-[3-(1-methylethyl)phenyl]-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

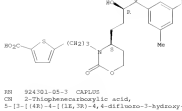
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924701-03-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(3R)-4-(3,5-dimethylphenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

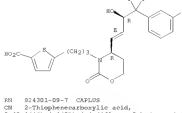
Absolute stereochemistry.



RN 924701-05-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

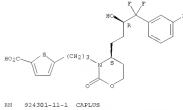
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924701-09-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(3R)-4,4-difluoro-3-hydroxy-4-[3-(1-methylethyl)phenyl]butyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

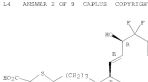
Absolute stereochemistry.



RN 924701-11-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-bromo-5-[3-[(4R)-4-[(1E,7R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

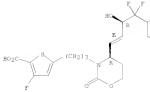
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924701-32-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E,7R)-4-(7-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-3-fluoro- (CA INDEX NAME)

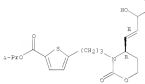
Absolute stereochemistry.
Double bond geometry as shown.



RN 924702-13-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(3R)-4-[3-bromophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-3-fluoro- (CA INDEX NAME)

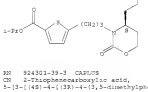
Absolute stereochemistry.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924702-38-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(3R)-4-[3-bromophenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.



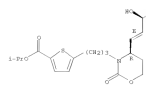
RN 924703-39-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(3R)-4-[3,5-dimethylphenyl)-4,4-difluoro-3-hydroxybutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 924701-15-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E,3R)-4-(3-bromo-5-iodophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

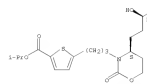
Absolute stereochemistry.
Double bond geometry as shown.



RN 924701-37-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

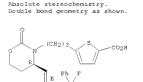
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 768400-29-9P 924300-97-0P 924300-99-2P
924301-01-9P 924301-02-0P 924301-04-2P
924301-06-4P 924301-10-0P 924301-21-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of oxazine derivs. as EP4 receptor agonists and antiglaucoma agents)
RN 768400-29-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

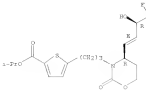
Absolute stereochemistry.
Double bond geometry as shown.



RN 924300-97-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-4-[(1E,7R)-4-(2,5-dichlorophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

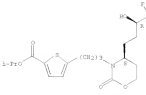
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924700-99-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(1E,3R)-4-(3,5-dichlorophenyl)-4,4-difluoro-3-hydroxybut-1-enyl]-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

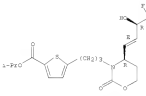
Absolute stereochemistry.



RN 924701-01-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(1E,3R)-4-(3,5-dimethylphenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

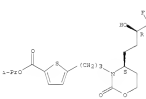
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924701-06-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(1E,3R)-4-difluoro-3-hydroxy-4-[3-(trifluoromethyl)phenyl]but-1-enyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

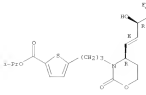
Absolute stereochemistry.



RN 924701-10-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-bromo-5-[3-[(4S)-4-[(1E,3R)-4-(3-bromophenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, methyl ester (CA INDEX NAME)

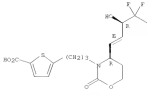
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 924701-02-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(1E,3R)-4-(3,5-dimethylphenyl)-4,4-difluoro-3-hydroxy-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX NAME)

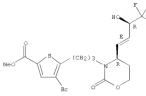
Absolute stereochemistry.
Double bond geometry as shown.



RN 924701-04-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-[3-(trifluoromethyl)phenyl]-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

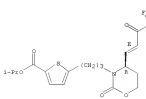
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



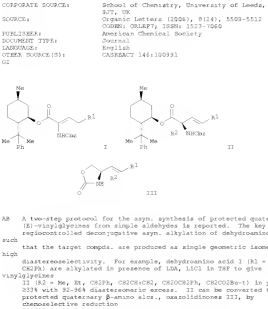
RN 924701-21-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4S)-4-[(1E)-4-(3-bromophenyl)-4,4-difluoro-3-oxo-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1136535 CAPLUS
DOCUMENT NUMBER: 146:102991
TITLE: Efficient Asymmetric Synthesis of Quaternary (E)-Vinylglycines by Deconjugative Alkylation of Dehydroamino Acids
AUTHOR(S): Owens, Matthew C.; Marsden, Stephen P.; Subtil, Dulce M. Munoz
CORPORATE SOURCE: School of Chemistry, University of Leeds, Leeds, LS2 9JT, UK
SOURCE: Organic Letters (2006), 8(24), 5503-5512
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:102991
GI

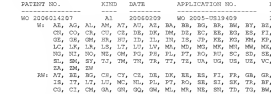


AB A two-step protocol for the asym. synthesis of protected quaternary (E)-vinylglycines from simple aldehydes is reported. The key step is a replacement-controlled deconjugative asym. alkylation of dehydroamino acids, such that the target compds. are produced as single geometric isomers with high diastereoselectivity. For example, dehydroamino acid I (R1 = CH2Ph, Ph, CH2Ph) are alkylated in presence of LDA, LiCl in THF to give vinylglycines II (R2 = Me, Et, CH2Ph, CH2CH:CH2, CH2CO2Bn, (E)-CH2CH:CHMe) in yields ≥73% with 92-96% diastereomeric excess. II can be converted to protected quaternary β-amino alcs., oxazolidinones III, by chemoselective reduction
IT 917603-84-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(asym. preparation of quaternary vinylglycines by deconjugative alkylation

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:126566 CAPLUS
DOCUMENT NUMBER: 144:192030
TITLE: Preparation of prostaglandin analogs as antiglaucoma agents
INVENTOR(S): Old, David W.; Dinh, Danny T.
PATENT ASSIGNEE(S): Allergan, Inc., USA
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006014257	A1	20060209	WO 2005-US19409	20050602
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005270239	A1	20060209	AU 2005-270239	20050602
CA 2571786	A1	20060209	CA 2005-2571786	20050602
EP 1771427	A2	20070411	EP 2005-761544	20050602
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
US 20060276461	A1	20061207	US 2005-552083	20051004
PRIORITY APPLN. INFO.:			US 2004-584628P	P 20040702
			US 2004-600165P	P 20040809
			WO 2005-US19409	W 20050602

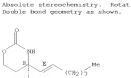
OTHER SOURCE(S): MARPAT 144:192030
GI



AB Compds. of formula I [A = (CH2)6, cis-CH2CH:CH(CH2)3, CH2C:tplbond.C(CH2)3; X = O, S, (substituted) NH; R = CO2R, (substituted) CONR2, etc.; J = CO,

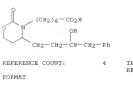
L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
of dehydroamino acids)
RN 917603-84-0 CAPLUS
CN 2H-1,3-Oxazin-2-one, 4-[(E)-1-decen-1-yl]tetrahydro-4-(hydroxymethyl)-, (4S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CHOR; E = alkyl, cycloalkyl, Ph, naphthyl] or a pharmaceutically acceptable salt or a prodrug thereof is disclosed herein. These compds. are useful for treating glaucoma or ocular hypertension.
IT 875314-81-1DP, derivs.
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of prostaglandin analogs as antiglaucoma agents)
RN 875314-81-1 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, dihydro-4-(3-hydroxy-4-phenylbutyl)-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

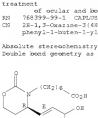
L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1106800 CAPLUS
DOCUMENT NUMBER: 143:357049
TITLE: Preparation of disubstituted piperidinones, oxazinanones, thiazinanones, and morpholinones as EP4 receptor agonist for treatment of ocular and bone disorders
INVENTOR(S): Billot, Xavier; Colucci, John; Han, Yongxin; Wilson, Marie-Claire; Young, Robert N.
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 70 pp., Division of U.S. Ser. No. 297,257.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20050227969	A1	20051013	US 2005-144992		20050607
US 7238719	B2	20070703			
US 20040190701	A1	20041007	US 2004-797257		20040310
US 7153985	B2	20061226			
BR 2004006969	A	20060328	BR 2004-6969		20040326
IN 2005DN02925	A	20070824	IN 2005-DN2925		20050902
IN 2005DN02925	A	20070824	IN 2005-DN2928		20050902
MX 2005PA10189	A	20060222	MX 2005-PA10189		20050923
NO 2005004951	A	20051222	NO 2005-4951		20051025
PRIORITY APPLN. INFO.:			US 2003-457700P	P	20030326
			US 2004-797257	A3	20040310
			WO 2004-CA471	W	20040326

OTHER SOURCE(S): MARPAT 143:357049
AB This invention relates to potent selective agonists of the EP4 subtype of prostaglandin E2 receptors, their use or a formulation thereof in the treatment of glaucoma and other conditions, which are related to elevated intraocular pressure in the eye of a patient. This invention further relates to the use of the compds. of this invention for mediating the bone
modeling and remodeling processes of the osteoblasts and osteoclasts. In particular, this invention relates to a series of 1,6-disubstituted piperidin-2-one, 3,6-disubstituted 1,3-oxazinan-2-one, 3,6-disubstituted 1,3-thiazinan-2-one, and 4,5-disubstituted morpholin-3-one derivs. The compds. of the invention are optionally formulated with other therapeutic agents useful in treating eye disorders or in stimulating bone formation such as β-adrenergic blocking agents, carbonic anhydrase inhibitors, and bisphosphonates. Preparation schemes for the compds. of the invention are
disclosed.
IT 768399-96-0P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

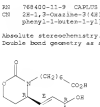
L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(drug candidate; prepn. of disubstituted piperidinones, oxazinanones, thiazinanones, and morpholinones as EP4 receptor agonists for treatment
of ocular and bone disorders)
RN 768399-96-0 CAPLUS
CN 2H-1,3-Oxazine-2(4H)-heptanoic acid, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]dihydro-2-oxo-, (4S)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 768400-11-9 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]dihydro-2-oxo-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 768400-14-2 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(3R)-4,4-difluoro-3-hydroxy-4-phenylbutyl]dihydro-2-oxo-, (4S)- (CA INDEX NAME)

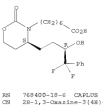
Absolute stereochemistry.

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(drug candidate; prepn. of disubstituted piperidinones, oxazinanones, thiazinanones, and morpholinones as EP4 receptor agonists for treatment
of ocular and bone disorders)
RN 768399-98-2 CAPLUS
CN 2H-1,3-Oxazine-2(4H)-heptanoic acid, 4-[(3S)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]dihydro-2-oxo-, 1-methylethyl ester, (4S)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

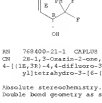
IT 768399-99-1P 768400-11-9P, 7-[(4R)-4-[(1E,3R)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-oxazinan-3-yl]heptanoic acid 768400-14-2P, 7-[(4S)-4-[(3R)-4,4-Difluoro-3-hydroxy-4-phenylbutyl]-2-oxo-1,3-oxazinan-3-yl]heptanoic acid 768400-18-6P
, Isopropyl
7-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,7-oxazinan-7-yl]heptanoate 768400-21-1P, (4R)-4-[(1E,3R)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[6-(2H-tetrazol-5-yl)hexyl]-1,3-oxazinan-2-one 768400-29-9P,
5-[3-[(4R)-4-[(1E,3R)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-oxazinan-3-yl]propyl]thiophene-2-carboxylic acid 768400-32-4P, (4R)-4-[(1E,3R)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-3-[5-(2H-tetrazol-5-yl)thien-2-yl]propyl]-1,3-oxazinan-2-one 768400-35-7P
(4S)-4-[(3R)-4,4-Difluoro-3-hydroxy-4-phenylbutyl]-3-[3-[5-(2H-tetrazol-5-yl)thien-2-yl]propyl]-1,3-oxazinan-2-one 768400-40-4P, Isopropyl
5-[3-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-oxazinan-3-yl]propyl]thiophene-2-carboxylate 866465-52-9P, (5E)-7-[(4R)-4-[(1E,3R)-4,4-Difluoro-3-hydroxy-4-phenylbut-1-enyl]-2-oxo-1,3-oxazinan-3-yl]hept-5-enoic acid 866465-55-4P, (5E)-7-[(4S)-4-[(3R)-4,4-Difluoro-3-hydroxy-4-phenylbutyl)-2-oxo-1,3-oxazinan-3-yl]hept-5-enoic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 768400-18-6 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]dihydro-2-oxo-, 1-methylethyl ester, (4R)- (CA INDEX NAME)

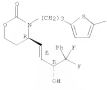
Absolute stereochemistry.
Double bond geometry as shown.



RN 769400-21-1 CAPLUS
CN 2H-1,3-Oxazin-2-one,
4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]tetrahydro-3-[6-(2H-tetrazol-5-yl)hexyl]-, (4R)- (CA INDEX NAME)

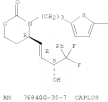
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 768400-32-4 CAPLUS
CN 2H-1,3-Oxazin-2-one,
4-[(2E,7R)-4,4-difluoro-5-hydroxy-6-phenyl-1-hexen-1-
yl]tetrahydro-3-[3-[5-(2H-tetrazol-5-yl)-2-thienyl]propyl]-, (4R)- (CA
INDEX NAME)

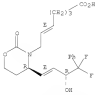
Absolute stereochemistry.
Double bond geometry as shown.



RN 768400-35-7 CAPLUS
CN 2H-1,3-Oxazin-2-one, 4-[(3R)-4,4-difluoro-3-hydroxy-4-
phenylbutyl]tetrahydro-3-[3-[5-(2H-tetrazol-5-yl)-2-thienyl]propyl]-,
(4S)- (CA INDEX NAME)

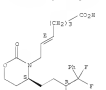
Absolute stereochemistry.

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 866465-55-6 CAPLUS
CN 5-Heptenoic acid, 7-[(4R)-4-[(3S)-4,4-difluoro-3-hydroxy-4-
phenylbutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]-, (5E)-rel- (CA INDEX
NAME)

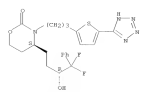
Relative stereochemistry.
Double bond geometry as shown.



IT 768400-09-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of disubstituted piperidinones, oxazinanones,
thiazinanones,
and morpholinones as EP4 receptor agonists for treatment of ocular and
bone disorders)
RN 768400-09-9 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid,
4-[(2E)-4,4-difluoro-3-oxo-6-phenyl-1-
hexen-1-yl]dihydro-2-oxo-, 1-methylethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 768400-40-4 CAPLUS
CN 2-Thiophenecarboxylic acid,
5-[2-[(4R)-4-[(1E,3S)-4,4-difluoro-3-hydroxy-4-
phenyl-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-,
1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 866465-52-3 CAPLUS
CN 5-Heptenoic acid, 7-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-
buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]-, (5E)-rel- (CA INDEX
NAME)

Relative stereochemistry.
Double bond geometry as shown.

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:817887 CAPLUS
DOCUMENT NUMBER: 141:314052
TITLE: Preparation of prostaglandin analogs as EP4 receptor agonists for the treatment of glaucoma
INVENTOR(S): Millar, Xavier; Colucci, John; Han, Yongxin; Wilson, Marie-Claire; Young, Robert N.
PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004314052	A1	20041007	WO 2004-CA470	20040326
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2004224261	A1	20041007	AU 2004-224261	20040326
CA 2519938	A1	20041007	CA 2004-2519938	20040326
WO 2004314471	A1	20041007	WO 2004-CA471	20040326
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
EP 1617821	A1	20060111	EP 2004-723484	20040326
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
BR 2004008696	A	20060328	BR 2004-8696	20040326
CN 1764659	A	20060426	CN 2004-80008186	20040326
JP 2006520758	T	20060914	JP 2006-504090	20040326
IN 2005DN03925	A	20070824	IN 2005-DN3925	20050902
IN 2005DN03925	A	20070824	IN 2005-DN3928	20050902
MX 2005PA10189	A	20060222	MX 2005-PA10189	20050923
NO 2005004951	A	20051222	NO 2005-4951	20051025
PRIORITY APPLN. INFO.:			US 2003-457700P	P 20030326

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

			WO 2004-CA470	20040326
			WO 2004-CA471	W 20040326

OTHER SOURCE(S): MARPAT 141:314052
GI

I II

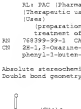
AB Prostaglandin analogs of formula I [Q = alkylene, alkylarylene, alkylcycloalkylene, etc.; X, Y = CE2, O, (substituted) NR, S; U = R, alkyl, absent; W = OR, oxo; R1 = hydroxyalkyl, cyanoalkyl, carboxy, heterocyclylalkyl, etc.; R2 = alkyl, aryl, heteroaryl, etc.; R3, R4 = R, halo, alkyl; R3R4 = alkylene, etc.; Z = triple bond, O, S, CE=CR, etc.; n = 0-4] are prepared as potent selective agonists of the EP4 subtype of prostaglandin E2 receptors, and can be used in a formulation for the treatment of glaucoma and other conditions, which are related to elevated intraocular pressure in the eye of a patient. This invention further relates to the use of the compds. of this invention for mediating the bone modeling and remodeling processes of the osteoblasts and osteoclasts. Thus, II was prepared in several steps from (R)-glycidol. IT 769399-98-02
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of prostaglandin analogs as EP4 receptor agonists for the treatment of glaucoma)
RN 769399-98-0 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]dihydro-2-oxo-, 1-methylethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

IT 769399-99-12 769400-11-92 769400-14-22 769400-14-42 769400-15-52 769400-21-12 769400-26-62 769400-29-92 769400-32-43 769400-33-73 769400-37-93 769400-40-42 769400-43-72 769400-46-02
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of prostaglandin analogs as EP4 receptor agonists for the treatment of glaucoma)
RN 769399-99-3 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(1E)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]dihydro-2-oxo-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



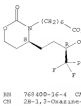
RN 769400-11-9 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]dihydro-2-oxo-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

RN 769400-14-2 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(3R)-4,4-difluoro-3-hydroxy-4-phenylbutyl]dihydro-2-oxo-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.



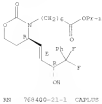
RN 769400-16-4 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, dihydro-4-[(3R)-3-hydroxy-4-phenylbutyl]-2-oxo-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 769400-18-6 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-yl]dihydro-2-oxo-, 1-methylethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



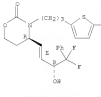
RN 768400-21-1 CAPLUS
CN 2H-1,3-Oxazin-2-one,
4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-
yl]tetrahydro-3-[4-(2H-tetrazol-5-yl)hexyl]-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 768400-26-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-dihydro-4-[(1E,3S)-3-hydroxy-4-
phenyl-1-buten-1-yl]-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA INDEX
NAME)

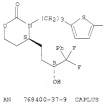
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



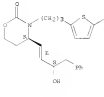
RN 768400-35-7 CAPLUS
CN 2H-1,3-Oxazin-2-one, 4-[(3R)-4,4-difluoro-3-hydroxy-4-
phenylbutyl]tetrahydro-3-[3-[5-(2H-tetrazol-5-yl)-2-thienyl]propyl]-,
(4S)- (CA INDEX NAME)

Absolute stereochemistry.

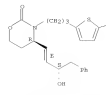


RN 768400-37-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[(4R)-dihydro-4-[(1E,3S)-3-hydroxy-4-
phenyl-1-buten-1-yl]-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-, 1-methylethyl
ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

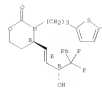


L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 768400-29-9 CAPLUS
CN 2-Thiophenecarboxylic acid,
5-[3-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-
phenyl-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]- (CA
INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



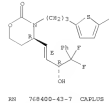
RN 768400-32-4 CAPLUS
CN 2H-1,3-Oxazin-2-one,
4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-buten-1-
yl]tetrahydro-3-[3-[5-(2H-tetrazol-5-yl)-2-thienyl]propyl]-, (4R)- (CA
INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

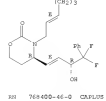
RN 768400-40-4 CAPLUS
CN 2-Thiophenecarboxylic acid,
5-[3-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-
phenyl-1-buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]propyl]-,
1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 768400-43-7 CAPLUS
CN 5-Heptenoic acid, 7-[(4R)-4-[(1E,3R)-4,4-difluoro-3-hydroxy-4-phenyl-1-
buten-1-yl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]-, (5E)- (CA INDEX NAME)

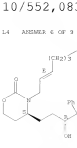
Absolute stereochemistry.
Double bond geometry as shown.



RN 768400-46-0 CAPLUS
CN 5-Heptenoic acid, 7-[(4S)-4-[(3R)-4,4-difluoro-3-hydroxy-4-
phenylbutyl]dihydro-2-oxo-2H-1,3-oxazin-3(4H)-yl]-, (5E)- (CA INDEX
NAME)

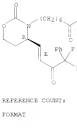
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 76740G-09-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of prostaglandin analogs as EP4 receptor agonists for the treatment of glaucoma)
RN 76740G-09-5 CAPLUS
CN 2H-1,3-Oxazine-3(4H)-heptanoic acid, 4-[(2E,4,4-difluoro-3-oxo-4-phenyl-1-buten-1-yl]dihydro-2-oxo-, 1-methylethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1990:459177 CAPLUS
DOCUMENT NUMBER: 113:59177
ORIGINAL REFERENCE NO.: 113:10015a,10015a
TITLE: Preparation of oxazolidinone penetration enhancing compounds
INVENTOR(S): Rajadhyaksha, Vithal J.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9000467	A1	19900125	WO 1989-US2779	19890623
W: JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4940771	A	19900710	US 1988-218316	19880711
EP 378657	A1	19900725	EP 1989-908033	19890623
EP 378657	B1	19940202		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 02500288	T	19900104	JP 1989-507546	19890623
JP 2501237	B2	19960607		
AT 101046	T	19940215	AT 1989-908033	19890623
PRIORITY APPLN. INFO.:			US 1988-218316	A 19880711
			EP 1989-908033	A 19890623
			WO 1989-US2779	W 19890623

OTHER SOURCE(S): CASREACT 113:59177; MARPAT 113:59177
GI

AB Title compds. I (R = H, C1-18 alkyl, cycloalkyl, aryl, aralkyl, alkoxy, etc.; X = O, NIR; R1 = H, alkyl, aralkyl, C1-18 acyl, cycloalkyl, etc.; Y = O, NIR, H2 = H, alkyl, aralkyl, cycloalkyl, C1-18 acyl, hydroxyalkyl, etc.; m = 2-4; n = 0-4, with several provisos) are prepared Me(CH2)9CHEtCH2CH2N and ethylene carbonate were heated to .apprx.110° to give 4-decyloxazolidin-2-one (II). In a test using isosorbide dinitrate (0.07%) and 1.4% II, II showed superior permeation enhancing properties compared to control and a known permeation enhancer.
IT 128276-13-1 128276-14-2 128276-15-3

L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
RL: RCT (Reactant); RACT (Reactant or reagent)
(penetration enhancer for topical pharmaceuticals)
RN 128276-13-1 CAPLUS
CN 2H-1,3-Oxazin-2-one, 4-dodecyltetrahydro- (CA INDEX NAME)

RN 128276-14-2 CAPLUS
CN 2H-1,3-Oxazin-2-one, 4-dodecyltetrahydro-3-methyl- (CA INDEX NAME)

RN 128276-15-3 CAPLUS
CN 2H-1,3-Oxazin-2-one, 3-acetyl-4-dodecyltetrahydro- (CA INDEX NAME)

L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1990:407423 CAPLUS
DOCUMENT NUMBER: 113:7421
ORIGINAL REFERENCE NO.: 113:1417a,1420a
TITLE: Chemistry in adsorbed monolayers. 2. Thermal and photochemical grafting reactions at the polymer-filler interface
AUTHOR(S): McGarvey, Colette E.; Holden, David A.
CORPORATE SOURCE: Guelph-Waterloo Cent. Grad. Work Chem., Univ. Waterloo, Waterloo, ON, N2L 3G1, Can.
SOURCE: Langmuir (1990), 6(6), 1123-32
CODEN: LANGD5; ISSN: 0743-7463
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The photochem. of adsorbed long-chain ω-diazo ketones, azidoformates, and ω-azido ketones was examined as a method of coupling linear low-d. polyethylene with alumina, silica, and silica gel fillers. Photoreactions of monolayers adsorbed on alumina showed that grafting predominated and that intrachain reactions were much less pronounced than analogous photoreactions in cyclohexane solution Monofunctional coupling agents such as octadecanoyl azide provided no improvement in elongation at break, but bifunctional agents containing both a photochem. and a thermally active group, such as 12-azido-1-diazo-2-dodecanone and 1-diazo-11-dodecen-2-one, provided significant improvements. Evidence for improved adhesion between filler and polymer was provided by fracture-surface morphol. studies.
IT 126952-64-2P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in photolysis of nitrogen-containing coupling agents)
RN 126952-64-2 CAPLUS
CN 2H-1,3-Oxazin-2-one, tetrahydro-4-(7-octenyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1974:14882 CAPLUS
DOCUMENT NUMBER: 80:14882
ORIGINAL REFERENCE NO.: 80:2437a,2520a
TITLE: Cyclization of azidoformates
AUTHOR(S): Breslow, David S.; Ward, George R.
CORPORATE SOURCE: Res. Cent., Hercules Inc., Wilmington, DE, USA
SOURCE: Journal of Organic Chemistry (1973), 38(24), 4205-6
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The previously unidentified product (Breslow, D. S., et al., 1967) formed in the thermal decomposition of octadecyl azidoformate is 4-pentadecyltetrahydro-2H-1,3-oxazin-2-one. Thus, octadecyloxycarbonylnitrene "back-bites" to give both a five-membered and a six-membered ring compound. The compound reported previously as 4-methyltetrahydro-2H-1,3-oxazin-2-one is the 6-methyl derivative
IT 42202-88-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 42202-88-0 CAPLUS
CN 2H-1,3-Oxazin-2-one, tetrahydro-4-pentadecyl- (CA INDEX NAME)